

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-5 (canceled).

Claim 6 (new): A duplexer, comprising:

a transmission-side band filter including a plurality of surface acoustic wave resonators connected together to define a ladder circuit;

a reception-side band filter including a plurality of surface acoustic wave resonators connected together to define a ladder circuit; wherein

each of the plurality of surface acoustic wave resonators of the transmission-side band filter and the reception-side band filter includes a 47° to 58° rotated, Y-cut, X-propagating LiNbO₃ substrate and an IDT electrode provided on the LiNbO₃ substrate;

the IDT electrode includes a Ti foundation electrode layer disposed on the LiNbO₃ substrate and an Al electrode layer disposed on the Ti foundation electrode layer; and

a (111) face of the Al electrode layer, one of a (001) face and (100) face of the Ti foundation electrode layer, and a (001) face of the LiNbO₃ substrate are aligned in parallel.

Claim 7 (new): The duplexer according to Claim 6, where the Ti foundation electrode layer is an epitaxially grown electrode layer on the LiNbO₃ substrate and the Al electrode layer is an epitaxially grown electrode layer on the Ti foundation electrode layer.

Claim 8 (new): The duplexer according to Claim 6, wherein in the reception-side band filter, a first inductance is disposed in parallel with respect to at least one serial arm resonator connected to a serial arm of the ladder circuit among the plurality of surface acoustic wave resonators, and in the transmission-side band filter, a second inductance is disposed between a parallel arm resonator connected to a parallel arm of the ladder circuit among the plurality of surface acoustic wave resonators and a ground potential.

Claim 9 (new): The duplexer according to Claim 8, wherein the first inductance and the second inductance are respectively defined by at least one of a wire bonding used for electrical connection in the duplexer, a line embedded in the duplexer, and an external coil component.

Claim 10 (new): The duplexer according to Claim 8, wherein the first inductance and the second inductance are respectively defined by at least one of a wire bonding used for electrical connection in the duplexer and a line embedded in the duplexer.

Claim 11 (new): The duplexer according to Claim 6, wherein the transmission-side band filter includes three serial arm resonators and two parallel arm resonators defining the ladder circuit.

Claim 12 (new): The duplexer according to Claim 6, wherein the reception-side band filter includes three serial arm resonators and two parallel arm resonators defining the ladder circuit.

Claim 13 (new): The duplexer according to Claim 6, wherein the LiNbO_3 substrate is a 55° rotated, Y-cut, X-propagating LiNbO_3 substrate.

Claim 14 (new): A communication device, comprising the duplexer according to Claim 6, wherein the duplexer includes an antenna terminal, an inductance is disposed between the antennal terminal and an antenna, and the duplexer further includes a capacitor connected between a connection point between the inductance and the antenna and a ground potential.

Claim 15 (new): A duplexer, comprising:
a transmission-side band filter including a plurality of surface acoustic wave resonators connected together to define a ladder circuit;
a reception-side band filter including a plurality of surface acoustic wave resonators connected together to define a ladder circuit; wherein
each of the plurality of surface acoustic wave resonators of the transmission-side band filter and the reception-side band filter includes a 47° to 58° rotated, Y-cut, X-propagating LiNbO_3 substrate and an IDT electrode provided on the LiNbO_3 substrate;
the IDT electrode includes a Ti foundation electrode layer disposed on the LiNbO_3 substrate and an Al electrode layer disposed on the Ti foundation electrode layer.

Claim 16 (new): The duplexer according to Claim 15, wherein a (111) face of the Al electrode layer, one of a (001) face and (100) face of the Ti foundation electrode layer, and a (001) face of the LiNbO_3 substrate are aligned in parallel.

Claim 17 (new): The duplexer according to Claim 15, where the Ti foundation electrode layer is an epitaxially grown electrode layer on the LiNbO_3 substrate and the Al electrode layer is an epitaxially grown electrode layer on the Ti foundation electrode layer.

Claim 18 (new): The duplexer according to Claim 15, wherein in the reception-side band filter, a first inductance is disposed in parallel with respect to at least one serial arm resonator connected to a serial arm of the ladder circuit among the plurality of surface acoustic wave resonators, and in the transmission-side band filter, a second inductance is disposed between a parallel arm resonator connected to a parallel arm of the ladder circuit among the plurality of surface acoustic wave resonators and a ground potential.

Claim 19 (new): The duplexer according to Claim 18, wherein the first inductance and the second inductance are respectively defined by at least one of a wire bonding used for electrical connection in the duplexer, a line embedded in the duplexer, and an external coil component.

Claim 20 (new): The duplexer according to Claim 18, wherein the first inductance and the second inductance are respectively defined by at least one of a wire bonding used for electrical connection in the duplexer and a line embedded in the duplexer.

Claim 21 (new): The duplexer according to Claim 15, wherein the transmission-side band filter includes three serial arm resonators and two parallel arm resonators defining the ladder circuit.

Claim 22 (new): The duplexer according to Claim 15, wherein the reception-side band filter includes three serial arm resonators and two parallel arm resonators defining the ladder circuit.

Claim 23 (new): The duplexer according to Claim 15, wherein the LiNbO_3 substrate is a 55° rotated, Y-cut, X-propagating LiNbO_3 substrate.

Claim 24 (new): A communication device, comprising the duplexer according to Claim 15, wherein the duplexer includes an antenna terminal and an antenna, a inductance is disposed between the antennal terminal and the antenna, and the duplexer further includes a capacitor connected between a connection point between the inductance and the antenna and a ground potential.